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## ANGULAR MOMENTUM EXCHANGES BETWEEN THE EARTH AND THE HYDROSPHERE AND CONSEQUENT LENGTH OF DAY VARIATIONS

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Seasonal and interannual fluctuations of the solid Earth's angular momentum are mostly due to angular momentum exchanges between the solid Earth and the hydrosphere. Inside the hydrosphere, angular momentum is transported by winds in the atmosphere, currents in the oceans, and water masses redistributions inside the atmosphere, the ocean and water storage at the continents surface. Through pressure, gravitational and friction torques, angular momentum is exchanged between the hydrosphere and the solid Earth. We have evaluated the global hydrospheric angular momentum budget from atmospheric global circulation model (NCEP/NCAR reanalysis), oceanic circulation model forced by atmospheric winds (Miami Isopycnic Coordinates Ocean Model), oceans forced by atmospheric pressure (Topex/Poseidon), snow and soil moisture (NCEP/NCAR reanalysis), glaciers, ice caps, and hydrological reservoirs. Comparison between observed and modeled variations of the length of day provide insights of the involved interaction processes.

### Submittal Information

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### Abstracts to be submitted on or before December 15, 1997 to

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